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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,199	12/29/2000	Dean Throop	40921/250098	8124
26108	7590	09/07/2005	EXAMINER	
DANIELS DANIELS & VERDONIK, P.A. SUITE 200 GENERATION PLAZA 1822 N.C. HIGHWAY 54 EAST DURHAM, NC 27713				SCHNEIDER, JOSHUA D
ART UNIT		PAPER NUMBER		
2182				

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/752,199	THROOP, DEAN
	Examiner	Art Unit
	Joshua D. Schneider	2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 June 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/29/2005 have been fully considered but they are not persuasive. With regards to the rejection under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, applicant has amended the claims to more specifically draw attention to the structural differences of two types of requests. While this makes the claim much clearer, it does not address the heart of the issue being raised by the rejection. The language still claims structuring the workstation request "in a manner substantially the same" as a host request. It is unclear what falls within and what would fall outside the scope of this limitation.

2. Applicant has also argued that there is no teaching in U.S. Patent 6,470,382 to Wang et al. of providing a direct connection from a workstation to a target device, without interrupting a host system (server). While applicant has correctly pointed out that the workstations (Clients 306A-B) are coupled to the hosts (Servers 302A-B), the workstations are also coupled directly to the target devices (netSCSI 310A-B). Wang also teaches that the workstations may establish direct connections with target netSCSI devices (Fig. 4A, column 8, line 58, through column 11, line 6) in substantially the same way as direct SCSI requests from a host system (Fig. 4B, column 11, line 7, through column 13, line 9).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 2 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regards to claims 2 and 14, Applicant claims structuring the field of the SCSI request in a manner substantially the same as a direct SCSI request. It is unclear to what the limitation substantially refers. It is unclear what falls within and what would fall outside the scope of this limitation.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,470,382 to Wang et al.

8. With regards to claims 1 and 13, Wang teaches establishing a direct IP connection between a workstation making up part of a computer system and a target device on a network (Fig. 4A, column 8, line 58, through column 11, line 6, and column 6, lines 31-52); encoding a SCSI request with a tag identifying the request as a SCSI request (column 19, lines 1-12), and structuring the request with a request IP/ID (column 2, lines 39-49, and column 10, lines 38-64); sending the tagged SCSI request to the target device (column 11, line 10, through column 12, line 26); returning the request IP/ID of the SCSI request from the target device to the computer system (column 11, line 10, through column 12, line 26). Wang does not explicitly teach the use

of the TCP/IP protocol. It would have been obvious to one of ordinary skill in the art at the time of invention to use the TCP/IP protocol as the IP protocol with the system of Wang in order to increase compatibility with the wide variety of machines that are currently enabled to use well known TCP/IP protocol.

9. With regards to claims 2 and 14, Wang teaches structuring the field of the SCSI request which is direct from the workstation (client direct request, Fig. 4A, column 8, line 58, through column 11, line 6) in a manner substantially the same as a direct SCSI request from a host system making up part of the computer system to a target device (server request, column 2, lines 39-49, and Fig. 4B, column 11, line 7, through column 13, line 9).

10. With regards to claims 6, 8, 17, and 19, Wang teaches the target device is a storage system (column 1, lines 14-18).

11. With regards to claims 7, 9, 18, 20, and 23, Wang teaches a server connected to the storage system through SCSI cable, a workstation connected to the server, and further comprising the workstation directly connected to the storage system for establishing the IP connection with the storage system (Figs. 3A-C). Wang teaches server client relationship establishment (column 11, line 10, through column 12, line 26). This relationship is also inherent to the connection establishment under the TCP portion of the TCP/IP protocol. It would have been obvious to one of ordinary skill in the art at the time of invention to use the TCP/IP protocol as the IP protocol with the system of Wang in order to increase compatibility with the wide variety of machines that are currently enabled to use well known TCP/IP protocol.

12. With regards to claims 10 and 21, Wang does not explicitly teach denying a connection from the workstation to the target device if a request from the workstation does not include a

recognized IP>ID, but such a denial is inherent to TCP/IP. It would have been obvious to one of ordinary skill in the art at the time of invention to use the TCP/IP protocol as the IP protocol with the system of Wang in order to increase compatibility with the wide variety of machines that are currently enabled to use well known TCP/IP protocol.

13. With regards to claims 11 and 22, Wang does not explicitly teach denying a connection from the computer system to the target device if the time for reading a completed message exceeds a predetermined amount of time, but such a denial is inherent to TCP/IP. It would have been obvious to one of ordinary skill in the art at the time of invention to use the TCP/IP protocol as the IP protocol with the system of Wang in order to increase compatibility with the wide variety of machines that are currently enabled to use well known TCP/IP protocol.

14. With regards to claim 12, Wang teaches a direct connection is established on a network separate from a SCSI cable connection between the host system and the target device (column 11, line 10, through column 12, line 26).

15. With regards to claims 3 and 15, Wang does not explicitly teach sending SCSI request over an Ethernet connection using the TCP/IP protocol and the encoding including a data buffer containing data to allow the target device to read the data buffer using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention that receive and transmit buffers were used in popular commercially available Ethernet chips used to implement the LAN and IP environments taught by Wang. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

16. With regards to claim 4, Wang does not explicitly teach sending SCSI request over an Ethernet connection using the TCP/IP protocol and sending the data in conjunction with the SCSI request in a manner substantially different from direct SCSI requests from a host system to a target device, and which allows the host system to supply the data buffer without an explicit request from the target system, whereby the target system is allowed to receive the data immediately following the request without having to make an explicit request to obtain the data buffer. However, it was notoriously well known in the art at the time of invention, that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

17. With regards to claims 5 and 16, Wang does not explicitly teach sending SCSI request over an Ethernet connection using the TCP/IP protocol and returning a data buffer generated by the target device to the workstation using the established TCP/IP connection. However, it was notoriously well known in the art at the time of invention, that receive and transmit buffers were used in popular commercially available Ethernet chips. It would have been obvious to one of ordinary skill in the art to use transmit and receive Ethernet buffering to facilitate SCSI transfers over a TCP/IP protocol.

18. With regards to claims 24 and 25, Wang inherently teaches a computer system comprises a host and a workstation connected directly thereto, each containing software for cooperation with each other and further comprising operating said software to construct SCSI requests to send over a direct TCP/IP connection between the workstation and target device (Fig. 4A,

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column 8, line 58, through column 11, line 6, Fig. 4B, column 11, line 7, through column 13, line 9), as the systems work together at least in the recognition and handling of broadcast data.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDS



KIM HUYNH
PRIMARY EXAMINER
